

In the Claims

1. (Original) A system for managing projector bulb life, the system comprising:  
a luminance sensor disposed to sense the luminance of the projector bulb;  
a luminance controller interfaced with the luminance sensor and a power driver of the projector bulb, the luminance controller operable to reduce the power driver output to limit projector bulb luminance at or below a setpoint level associated with a desired projector bulb life if the maximum luminance of the projector bulb is greater than a predetermined brightness.
2. (Currently Amended) The system of Claim 1 wherein the luminance controller is further operable to increase power driver output to maintain projector bulb luminance substantially at the setpoint level if the sensed luminance falls to a predetermined brightness.
3. (Original) The system of Claim 1 further comprising a switch disposed between the power driver and the luminance controller, the switch operable to selectively disable the projector bulb luminance controller interface with the power driver.
4. (Original) The system of Claim 1 wherein the projector bulb comprises an ultra high pressure mercury vapor bulb.
5. (Original) The system of Claim 1 wherein the projector bulb comprises a xenon halogen bulb.
6. (Original) The system of Claim 1 wherein the luminance sensor comprises an infrared sensor associated with an infrared filter of the projector.
7. (Currently Amended) The system of Claim 1 wherein the luminance sensor comprises a visible light ~~sensor~~ sensor aligned to sense light leakage from a mirror of the projector.
8. (Original) A method for managing projector bulb life, the method comprising:

sensing the luminance of the projector bulb;  
determining that the sensed luminance exceeds a luminance threshold associated with a desired projector bulb life; and  
reducing the power applied to the projector bulb to reduce the luminance of the projector bulb to at or below the luminance threshold associated with the desired projector life.

9. (Original) The method of Claim 8 further comprising:  
determining that the sensed luminance falls below a luminance threshold associated with a minimum desired available luminance at a maximum brightness setting; and  
increasing the power applied to the projector bulb to increase the luminance of the projector bulb to the luminance threshold of the minimum desired luminance for the maximum brightness setting.

10. (Original) The method of Claim 9 wherein the luminance threshold associated with a desired projector bulb life and the luminance threshold associated with minimum desired available luminance are substantially equal when the projector is set at maximum brightness.

11. (Original) The method of Claim 8 further comprising engaging a switch to override the reducing of the power applied to the projector bulb so that the luminance exceeds the threshold.

12. (Original) The method of Claim 8 further comprising:  
passing the light from the projector bulb through an infrared filter;  
wherein sensing the luminance further comprises sensing the infrared light at the infrared filter.

13. (Currently Amended) The method of Claim 8 further comprising:  
passing the light from the projector bulb through a first aperture to a ~~columnator~~  
columnator for illuminating an image;  
passing the light from the projector bulb through a second aperture to a luminance sensor for sensing the luminance.

14. (Original) The method of Claim 8 wherein the bulb provides light for a digital mirror device projector having a color wheel, and wherein sensing the luminance further comprises sensing luminance at the color wheel.

15. (Original) The method of Claim 8 wherein the bulb provides light for a digital mirror device projector having a mirror for projecting an image, and wherein sensing the luminance further comprises sensing luminance of light leakage at the mirror.

16. (Original) A projector for display of information, the projector comprising:  
an image operable to display the information;  
a bulb operable to provide light to illuminate the image;  
a power driver interfaced with the bulb and operable to provide selectable variable power to illuminate the image with selectable variable luminance;  
a luminance sensor disposed to sense the luminance of the bulb; and  
a luminance feedback controller interface with the power driver and the luminance sensor, the luminance feedback controller operable to control power applied by the power driver according to the luminance sensed by the luminance sensor to achieve a predetermined bulb parameter.

17. (Original) The projector of Claim 17 wherein the luminance feedback controller achieves a desired bulb life by limiting power applied by the power driver to restrict luminance sensed by the luminance sensor at or below a predetermined setpoint.

18. (Original) The projector of Claim 17 wherein the luminance feedback controller achieves a desired maximum available luminance from the bulb by increasing power applied by the power driver to increase luminance sensed by the luminance sensor at or above a predetermined setpoint when the selected luminance exceeds a predetermined level.

19. (Original) The projector of Claim 17 further comprising a switch interfaced with the luminance feedback controller and operable to disengage control by the luminance feedback controller of the power driver.

20. (Original) The projector of Claim 17 wherein the image comprises output of a digital mirror device.